

## DISINFECTING DRINKING WATER WELLS

Migrant Farmworker Housing (MFH) water systems that have been shut down for a period of time may become contaminated. At least 2 weeks BEFORE the camp housing is occupied, the well and piping system should be disinfected.

Also, at any time during camp occupancy, if the pump or piping system has been opened up for repair or maintenance, the water system should be disinfected. Please call the Migrant Farmworker Housing Program at 1-800-771-1204.

### Step 1

- Run water from all of the systems outside faucets for at least 15 minutes. This will flush out all of the old stale water and other contaminants that have accumulated in the piping system during the facility's down season.

### Step 2

- Add chlorine to the well (standard household bleach can be used). The amount of chlorine bleach used will depend on the depth of the well. Please use the following examples as a guide for the amount of chlorine needed:

TOTAL WELL DEPTH	AMOUNT OF CHLORINE BLEACH
Less than 40 feet	0.5 gallon
40 feet to 150 feet	1.0 gallon
150 feet or more	1.5 to 2.0 gallons

- Under normal circumstances, using the above listed amounts of bleach will result in a good disinfecting concentration of chlorine. Using more bleach than listed above will result in an excessive amount of chlorine that can damage piping.
- Use a convenient access point to pour the bleach into the well. On many wells, the vent pipe hole in the sanitary seal (well cap) can be used to pour in the bleach. Be sure to replace the vent pipe when you are finished. On some wells, the well's seal cap is easily removed and the bleach can be poured directly into the well. Again be sure to replace the well head seal when the disinfection process is completed.
- If you are not sure how to gain access into the well, please ask advice from someone familiar with well systems. Normally, businesses such as pump repair and well drilling firms can assist you.

### Step 3

- After the bleach has been poured into the well, the well water should be re-circulated back into the well. Re-circulation ensures the chlorine will be

completely mixed throughout the water in the well. Re-circulation can be accomplished by simply connecting a new hose to a nearby faucet and running the hose into the well head opening or connecting it to the vent hole opening. Turn the faucet on and run the water back into the well. Re-circulation should continue for at least 4 hours. When the re-circulation process is completed, disconnect the hose and replace the well cap or the well vent pipes.

#### **Step 4**

- After step 3 has been completed, run water through each inside and outside faucet on the system until you can detect the odor of chlorine, then turn it off. Start with the closest faucet to the well and work your way out to the most distant faucet. A chlorine residual test kit can also be used to test for the presence of chlorine.

#### **Step 5**

- Shut down the system for at least 12 hours, preferably for 24 hours. The down time allows the chlorine to properly disinfect the water in the well and piping system.

#### **Step 6**

- Run outside faucets to flush the chlorine from the system. Run the faucets until you can no longer detect the odor of chlorine. Do not run the inside faucets or toilets. To do so will allow the excessive amounts of chlorine to enter the sewage disposal system. Excessive chlorine can kill the helpful bacteria in the sewage system. Once the flush out is completed, the inside faucets and toilets may be utilized to remove the small remaining amounts of chlorine in the interior plumbing.
- When flushing the water system be careful where the discharged water goes. It is important to ensure this water runs away from any septic tank system. Also, make sure the water will not damage vegetation and property. Do not run the flush out water into a lake or stream, or any pathway that leads to a lake or stream. Chlorine is toxic to fish. A well pumping 5 gallons a minute for 24 hours will produce 7200 gallons of water.

#### **Step 7**

- A test for bacteria (coliform) can be taken a week after the disinfection process has been completed. When collecting a water sample, it is important to follow the collection instructions packaged with the sample container.
- If you have any questions, please call the MFH program at 1-800-771-1204.